# Online activity on chlorophyll

photosynthesis

Chlorophylls are the most important dyes as they play a role in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. As of today, seven types of chlorophylls have been detected with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ being the most important ones since they contribute to photosynthesis.

chlorophyll b

chlorophyll a

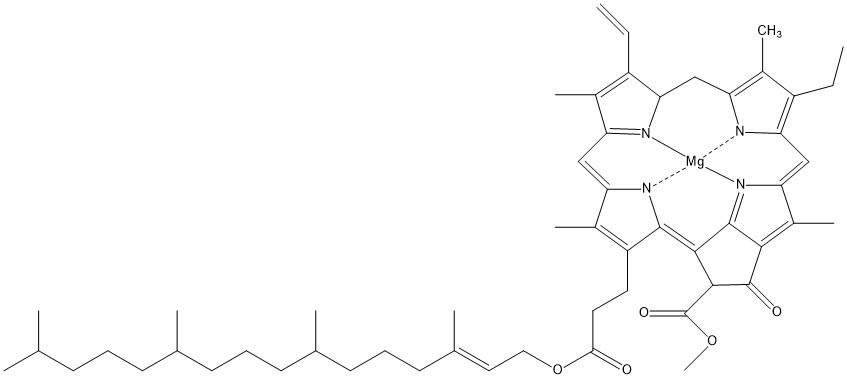
These green pigments can be found in tissue of green plants. More precisely, they are located in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (an organelle in plant cell). The two types of chlorophylls have a slightly different colour and chemical structure. The difference between the two types is in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ adjacent to the second pyrrole of the compound. A characteristic to both is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ located in the centre of the heme structure.

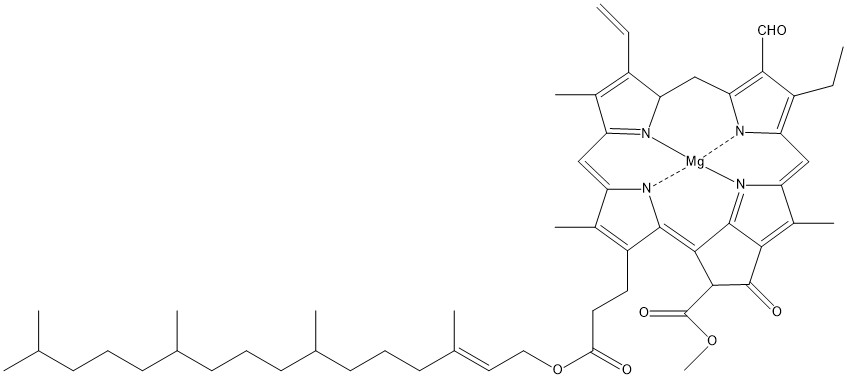
magnesium ion

functional group

methyl

chloroplast

**What different functional groups can you find in the structure of *chlorophyll a* and *b*?**



pyrrole

aldehyde

carboxylate

ketone

*Chlorophyll b*

*Chlorophyll a*